



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Director

??, 2017

Mr. Jon Rushford
VP Operations, North Cove
Baxter Healthcare Corporation
65 Pitts Station Road
Marion, NC 28752

SUBJECT: Air Quality Permit No. 05600T21
Facility ID: 5600164
Baxter Healthcare Corporation
Marion, North Carolina
McDowell County
Fee Class: Title V
PSD Status: Minor

Dear Mr. Rushford:

In accordance with your request for a renewal of your Title V permit, received December 17, 2015, we are forwarding herewith Air Quality Permit No. 05600T21 to Baxter Healthcare Corporation, 65 Pitts Station Road, Marion, North Carolina, authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS

150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

McDowell County has not been triggered for any pollutants, so no PSD increment tracking is required.

This Air Quality Permit shall be effective from ??, 2017 until ??, 2022, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

The changes made to the permit are summarized in the attachment to this letter. Should you have any questions concerning this matter, please contact please contact Brian Bland, at (919) 707-8732.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Heather Ceron, EPA Region 4 (with review)
Brendan Davey, Supervisor, Asheville Regional Office
Central Files
Connie Horne (cover letter only)

Summary of Changes to Permit

The following changes were made to the Baxter Healthcare Corporation Facility Air Permit No. 05600T20:

Page No(s).	Section/Condition No.	Description of Change
Attachment	Insignificant Activities	<ul style="list-style-type: none"> Add nine laser engravers (ID No. I-Laser Engravers) Add existing, but previously permitted, PVC Extruder Die Cleaning Oven (ID No. I-1724) with associated Water Spray Trap and Condenser (CD-J17452)
All	All	<ul style="list-style-type: none"> Update dates and permit revision number Correct minor grammatical errors Update wording and formatting to current DAQ standards (this is most noticeable in NSPS and MACT conditions)
3	Permitted Items	<ul style="list-style-type: none"> Change description and ID No. of multicyclone to reflect the installation of a new multicyclone Update ID No. ES-6 equipment description to reflect the use of cumene as well as cyclohexanone Change Boiler ID No. B-Temp-1 description to reflect it is a temporary boiler Remove PVC Extruder Die Cleaning Oven (ID No. ES-1724) with associated Water Spray Trap and Condenser (CD-J17452) as it has been moved to the insignificant activities list
4	2.1 A	<ul style="list-style-type: none"> Change ID No. of multicyclone to reflect the installation of a new multicyclone
4	2.1 A. 1. C	<ul style="list-style-type: none"> Set new deadline for required 15A NCAC 02D .0504 particulate matter compliance testing in wood-fired boiler (ID No. WBES-1) Clarify that if the test results show that the emission rate is more than 80 percent of the allowable limit, then testing shall be done annually instead of every 5 years
7	2.1 A. 5	<ul style="list-style-type: none"> Move NESHAP JJJJJ condition here from Section 2.2
10	2.1 B	<ul style="list-style-type: none"> Rework section to reflect that facility only plans on having this permitted source on site temporarily
11	2.1 B. 4	<ul style="list-style-type: none"> Update NSPS Subpart Dc condition to reflect current DAQ language
13	2.1 B. 6	<ul style="list-style-type: none"> Add NESHAP JJJJJ condition for Boiler ID No. B-Temp-1
N/A	2.1 D (revision T20)	<ul style="list-style-type: none"> Remove this section (ID Nos. ES-6 and ES-7) as the only applicable regulation was 15A NCAC 02D .0958 15A NCAC 02D .0958 is no longer applicable to this facility, as it no longer applies to facilities in this county as of November 1, 2016
N/A	2.1 E (revision T20)	<ul style="list-style-type: none"> Remove PVC Extruder Die Cleaning Oven (ID No. ES-1724) with associated Water Spray Trap and Condenser (CD-J17452) as it has been moved to the insignificant activities list
22	2.1 D. 5. d. and e (this section was previously 2.1 F)	<ul style="list-style-type: none"> Add GACT JJJJJ exemption from PM emission limit associated with the burning of ULS fuel that is effective in 2019
31	2.2 A. 3	<ul style="list-style-type: none"> Change ID No. of multicyclone to reflect the installation of a new multicyclone
N/A	2.2 B (revision T20)	<ul style="list-style-type: none"> Remove Boiler ID No. B-Temp-1 from condition Move remainder of condition to Section 2.1 A. 5
34	Section 3	<ul style="list-style-type: none"> Update General Conditions to version 5.1

ATTACHMENT to Permit No. 05600T21

INSIGNIFICANT ACTIVITIES under 15A NCAC 02Q .0503(8)

Source ID.	Emission Source Description
I-Wood	Wood handling and storage (includes open wood piles, manual material handling with front end loader, and manual unloading)
I-Oiltank	One fuel oil storage tank (6,000 gallon capacity)
I-EP10 Area Source MACT ZZZZ*	One 250 hp diesel-fired emergency fire pump engine
I-EP11 Area Source MACT ZZZZ*	One 250 hp diesel-fired emergency fire pump engine
I-EP12 Area Source MACT ZZZZ*	One 75 hp (50kW electrical) diesel-fired emergency lighting generator
I-OT-2	One No. 2 fuel oil storage tank (100,000 gallon capacity)
I-Tubing	Five PVC tubing extruders
I-Castfilm	Two HDPE cast film extruders
I-Chemlab	Chemistry laboratories supporting manufacturing operations
I-Laser Engravers	Nine laser engravers installed one each on Keifel production lines
I-1724	PVC Extruder Die Cleaning Oven with associated Water Spray Trap and Condenser (CD-J17452)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 15A NCAC 02Q .0711 "Emission Rates Requiring a Permit".
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows: <http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

* The initial RICE Area Source MACT ZZZZ compliance date is May 3, 2014.



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
05600T21	05600T20	??, 2017	??, 2022

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee:	Baxter Healthcare Corporation
Facility ID:	5600164
Facility Site Location:	65 Pitt Station Road
City, County, State, Zip:	Marion, McDowell County, North Carolina 28752
Mailing Address:	65 Pitt Station Road
City, State, Zip:	Marion, North Carolina 28752
Application Number:	5600164.15B
Complete Application Date:	May 31, 2017
Primary SIC Codes:	4961
Division of Air Quality,	Asheville Regional Office
Regional Office Address:	2090 US Highway 70
	Swannanoa, North Carolina 28778

Permit issued this the ??th day of ??, 2017

William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

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ATTACHMENT

List of Acronyms

SECTION 1- PERMITTED EMISSION SOURCES AND ASSOCIATED AIR POLLUTION CONTROL DEVICES AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page Number	Emission Source ID No.	Emission Source Description	Control Device No.	Control Device Description
Boilers				
4, 30	WBES-1 CAM, Area Source MACT JJJJJ	One water tube design wood-fired boiler with an overfire air system (162.9 million Btu per hour maximum heat input capacity) – (used oil generated on site may also be burned in this boiler)	MCCD-2 and WSCD-2	One multicyclone (72 twelve-inch diameter tubes) installed in series with one variable throat venturi-type wet scrubber (300 gallons per minute liquid injection rate)
19, 30	B-10 NSPS Dc, Area Source MACT JJJJJ	Natural gas/No. 2 fuel oil-fired boiler (60.52 million Btu per hour maximum heat input rate)	N/A	N/A
	B-11 NSPS Dc, Area Source MACT JJJJJ	Natural gas/No. 2 fuel oil-fired boiler (60.52 million Btu per hour maximum heat input rate)	N/A	N/A
10,30	B-Temp-1	No. 2 fuel oil-fired temporary boiler (no greater than 79 million Btu per hour maximum heat input rate)	N/A	N/A
Generators				
14, 30	EP-1 through EP-7 Area Source MACT ZZZZ	Seven diesel fuel-fired peak shaver generators (2,598 hp each)	N/A	N/A
27	EP-13 NSPS IIII, Area Source MACT ZZZZ	Diesel fuel-fired emergency generator (2,220 hp)	N/A	N/A
Support Operations				
N/A	ES-6*	Cyclohexanone and cumene bonding process	N/A	N/A
	ES-7*	Isopropyl alcohol facility cleanup operations	N/A	N/A

* Sources identified with an asterisk have no applicable requirements under the North Carolina SIP, but their emissions are greater than the thresholds under 15A NCAC 2Q .0503(8); these sources are permitted pursuant to 15A NCAC 2Q .0508(i)(15).

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 - Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. One water tube design wood-fired boiler (ID No. WBES-1) with associated multicyclone (ID No. MCCD-2) and venturi scrubber (ID No. WSCD-2)

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	0.38 pounds per million Btu heat input	15A NCAC 02D .0504
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Particulate Matter	Compliance assurance monitoring	15A NCAC 02D .0614 40 CFR 64
Hazardous Air Pollutants	Maximum Achievable Control Technology	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Particulate Matter Sulfur Dioxide Nitrogen Oxide Carbon Monoxide	See Section 2.2.A.1	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous Air Pollutants	See Section 2.2.A.3	15A NCAC 02Q .0317 (MACT Avoidance)

1. 15A NCAC 02D .0504: PARTICULATES FROM WOODBURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of wood from this boiler (ID No. WBES-1) shall not exceed 0.38 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing the source (ID No. WBES-1) for particulate matter with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ. Testing shall be completed at the end of a cleaning cycle when only one settling pond is operating as a worst-case scenario. Testing shall be completed within 180 days of the effective date of Air Permit No. 05600T21, unless an alternative date is approved by the DAQ, and for each subsequent 5-year period. Each 5-year test must be performed no more than 61 months after the previous test. If the test results show that the emission rate is more than 80 percent of the allowable limit given in Section 2.1 A.1.a above, the test frequency shall be increased to annually. Annual boiler testing must be performed no more than 13 months after the previous testing. After the annual testing requirement is triggered, two consecutive tests below 80 percent of the allowable limit given in Section 2.1 A.1.a will change the required frequency back to 61 months from the last test.

Monitoring [15A NCAC 02Q .0508(f)]

- d. Particulate matter emissions from this source (ID No. WBES-1) shall be controlled by one multicyclone (ID No. MCCD-2) followed by one venturi scrubber (ID No. WSCD-2) as described above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to

the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:

- i. A monthly external visual inspection of the system ductwork and material collection unit for leaks;
- ii. An annual (for each 12-month period from initial inspection) internal inspection of the multicyclone's structural integrity;
- iii. An annual (for each 12-month period from initial inspection) inspection of the spray nozzle and other internal components of the scrubber to detect clogging or corrosion damage and the performance of maintenance and repair to ensure proper operation of the scrubber; and
- iv. An annual (for each 12-month period from initial inspection) inspection, cleaning, and calibration of all associated instrumentation.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if the scrubber, multicyclone and ductwork are not inspected and maintained.

- e. The Permittee shall install, operate, and maintain a pressure drop indicator on the scrubber (**ID No. WSCD-2**). The pressure drop across the scrubber shall be maintained at or above a minimum of 2.0 inches of water. Should the results of any performance test demonstrate that the allowed pressure drop is incorrect to ensure compliance with allowable limit given in Section 2.1 A.1.a above, the Permittee shall submit those new ranges to the Division of Air Quality for inclusion in this permit within 30 days of receiving the results of the performance test. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if the pressure drop is not maintained within the prescribed limits.

Recordkeeping [15A NCAC 02Q .0508(f)]

- f. The results of each inspection and maintenance action shall be maintained in a logbook (written or electronic format) on site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The pressure drop, recorded once daily at a minimum, across the scrubber;
 - iii. The results of each inspection;
 - iv. A report of any maintenance performed on any control device; and
 - v. Any variance from manufacturer's recommendations, if any, and corrections made.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- g. Within 30 days of receipt of written request from the DAQ, the Permittee shall submit a report of any maintenance performed on any control device.
- h. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from this boiler (**ID No. WBES-1**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the combustion of wood or a combination of wood and used oil in this boiler (**ID No. WBES-1**).

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this boiler (**ID No. WBES-1**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed

87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with and General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a day the Permittee shall observe the emission points of this boiler (**ID No. WBES-1**) for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. If visible emissions from this boiler (**ID No. WBES-1**) are observed to be above normal, the Permittee shall either:
 - i. Take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) is below the limit given in Section 2.1 A.3.a above.
 If the above-normal emissions are not corrected per i. above or if the demonstration in ii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

- a. Per 40 CFR 64 and 15A NCAC 02D .0614, the Permittee shall comply with the following.
- b. **Background**
 - i. Emission Unit.
 - (A) Description. One wood-fired boiler.
 - (B) Identification. **ID No. WBES-1**
 - ii. Applicable Regulation, Emission Limit, and Monitoring Requirements.
 - (A) Regulation. 15A NCAC 02D .0504
 - (B) Emission limit: 0.38 pounds particulate matter per million Btu heat input (while burning wood only)
 - (C) Control Technology. multicyclone (**ID No. MCCD-2**) followed by venturi scrubber (**ID No. WSCD-2**). The scrubber is a horizontally fed vertical spray type scrubber with a minimum designed water flow of 250 gallons per minute.
- c. **Monitoring Approach.**
The key elements of the monitoring approach for particulate matter, including parameters to be monitored, parameter range and performance criteria are presented in the following table. The selected indicator is scrubber water flow rate.

	Scrubber Indicator
I. Indicator	Scrubber water flow rate
Measurement Approach	Water flow entering the scrubber will be monitored with a flow meter.

	Scrubber Indicator
II. Indicator Range	An excursion is defined as an hourly average flow less than 250 gallons per minute (gpm).
QIP Threshold	A QIP will be required if the total duration of excursions is greater than 5% of the total boiler operating time during the reporting period (excluding start-ups and shut-downs)
A. Data Representativeness	The flow meter can be installed on the water line as flow will be consistent throughout this line. The gauge has an accuracy of $\pm 5\%$.
B. Verification of Operational Status	A water flow meter will be installed with a transmitter that feeds to a data logger installed in the control room. The new meter will be installed and calibrated according to manufacturer's recommendations. The data logging program will be audited upon installation to verify that averages are being computed correctly.
C. QA/QC Practices	The flow meter will be calibrated annually based on manufacturer's instructions.
D. Monitoring Frequency	Measured at 15-minute intervals (maximum).
Data Collection Procedures	A data logging system will collect the individual readings and reduce them to a 1-hour average. Any 1-hour average below the specified indicator range will be flagged and reported as an excursion.
Averaging Periods	1-hour

Reporting [15A NCAC 02Q .0508(f), 40 CFR 60.9]

- d. The Permittee shall submit a summary report of all monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations for the requirements of this permit must be clearly identified.

The report shall also include the following information, as applicable:

- i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

5. 15A NCAC 02D .1111: MACT 40 CFR PART 63 SUBPART JJJJJ

Applicability [§63.11193, §63.11194(a),(b) and §63.11200(b),(c)]

- a. For this source (an existing boiler in the biomass subcategory, **ID No. WBES-1**), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart JJJJJ, "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers", including Subpart A "General Provisions."

Definitions and Nomenclature

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.11237 shall apply.

General Provisions [§63.11235]

- c. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart JJJJJJ. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Notification of Compliance Status [40 CFR 63.11225)]

- d. The Permittee shall submit a Notification of Compliance Status no later than July 19, 2014. This assessment was performed on July 18, 2014.

General Compliance Requirements [15A NCAC 02Q .0508(b)]

- e. At all times the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.11205(a)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Performance Tune-up Requirements [15A NCAC 02Q .0508(b)]

- f. The Permittee shall conduct an initial tune-up of the boiler and subsequent tune-ups biennially.
 - i. The Permittee shall achieve compliance with the initial tune-up no later than March 21, 2014. This tune-up was performed on February 2, 2012.
 - ii. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up.
 - iii. The Permittee shall conduct the tune-ups while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
 - iv. The tune-ups shall be conducted according to the following procedures:
 - (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.
 - (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.
 - (D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
 - (E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
 - (F) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

[40 CFR 63.11196(a), 40 CFR 63.11210(c), 40 CFR 63.11201(b), Table 2, 40 CFR 63.11223(a), (b)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(b)]

- g. The Permittee shall conduct a one-time energy assessment performed by a qualified energy assessor. This assessment was performed on February 4, 2014. [40 CFR 63.11201(b), Table 2]

Recordkeeping [15A NCAC 02Q .0508(f)]

- h. The Permittee shall maintain the following records:
 - i. As required in 40 CFR 63.10(b)(2)(xiv), the Permittee shall keep a copy of each notification and report that was submitted to comply with this rule and all documentation supporting any Notification of Compliance

Status that was submitted.

- ii. The Permittee shall keep the following records to document conformance with the performance tune-ups:
 - (A) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
 - (B) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
 - (C) A description of any corrective actions taken as a part of the tune-up of the boiler.
 - (D) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
 - iii. The Permittee shall keep a copy of each boiler energy assessment report.
 - iv. Records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment.
 - v. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Section 2.1 A.1.e, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
 - vi. For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the Permittee shall keep a record which documents how the secondary material meets each of the legitimacy criteria under 40 CFR 241.3(d)(1). If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4), you must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2 and each of the legitimacy criteria in 40 CFR 241.3(d)(1). If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per 40 CFR 241.4, you must keep records documenting that the material is a listed non-waste under 40 CFR 241.4(a).
[40 CFR 63.11225(c), 63.11223(b)(6)]
 - i. The records must be in a form suitable and readily available for expeditious review. The Permittee shall keep each record for 5 years following the date of each recorded action. The Permittee shall keep each record on site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The Permittee may keep the records off-site for the remaining 3 years. [40 CFR 63.11225(d)]
 - j. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 A.5.g through i are not met.
- Reporting** [15A NCAC 02Q .0508(f)]
- k. The annual compliance certification reporting requirements of §63.11225(b) shall be met by complying with General Condition P of Section 3 of this permit.

B. No. 2 fuel oil-fired boiler (ID No. B-Temp-1)

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	1.6 pounds per million Btu heat input	15A NCAC 02D .0402
Particulate Matter	0.27 pounds per million Btu heat input	15A NCAC 02D .0503
Visible Emissions	20 percent opacity <i>Does not apply if boiler is subject to NSPS Subpart Dc</i>	15A NCAC 02D .0521
Sulfur Dioxide and Visible Emissions	<i>NSPS Subpart Dc does not apply to temporary boilers as defined in §60.41c, including "...remains at a location for more than 180 consecutive days."</i>	15A NCAC 02D .0524 40 CFR 60, Subpart Dc
Toxic Air Pollutants	State Enforceable Only Except as described, Boiler ID No. B-Temp-1 may only operate when either Boiler ID No. B-10 or B-11 is not in operation.	15A NCAC 02D .1100
Hazardous Air Pollutants	<i>GACT Subpart JJJJJ does not apply to temporary boilers as defined in §63.11237 including, "...remains at a location within the facility...for more than 12 consecutive months."</i>	15A NCAC 02D .1111 40 CFR Part 63, Subpart JJJJJ
Particulate Matter Sulfur Dioxide Nitrogen Oxide Carbon Monoxide	See Section 2.2.A.1	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous Air Pollutants	See Section 2.2.A.3	15A NCAC 02Q .0317 (MACT Avoidance)

1. 15A NCAC 02D .0402: SULFUR OXIDES

- Emissions of sulfur dioxide emissions from the combustion of No. 2 fuel oil that are discharged from this source (**ID No. B-Temp-1**) into the atmosphere shall not exceed 1.6 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the applicable limit given in Section 2.1 B.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0402.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in this source (**ID No. B-Temp-1**).

2. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- Emissions of particulate matter from the combustion of No. 2 fuel oil that are discharged from this source (**ID No. B-Temp-1**) into the atmosphere shall not exceed 0.27 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

- If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the applicable limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of No. 2 fuel oil in this source (**ID No. B-Temp-1**).

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. B-Temp-1**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing No. 2 fuel oil in this source (**ID No. B-Temp-1**).

4. 15A NCAC 02D .0524: NSPS 40 CFR PART 60 SUBPART Dc

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."

Emission Limitations [15A NCAC 02D .0524]

- b. The maximum sulfur content of any fuel oil received and burned in the affected boiler (**ID No. B-Temp-1**) shall not exceed 0.5 percent by weight. [§60.42c(d)]
- c. Visible emissions when burning No. 2 fuel oil in the affected boiler (**ID No. B-Temp-1**) shall not be more than 20 percent opacity when averaged over a six-minute period, except for one six-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43c(c)]
- d. The SO₂ emission limit or fuel sulfur standard in Section 2.1 B.4.b above shall apply at all times, including periods of startup, shutdown, and malfunction. [40 CFR 60.42c(i)]
- e. The opacity standard in Section 2.1 B.4.c above shall apply at all times, excluding periods of startup, shutdown or malfunction. [40 CFR 60.43c(d)]

Testing [15A NCAC 02Q .0508(f)]

- f. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above any limit given in Sections 2.1 B.4.b or c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.
- g. For this boiler, the Permittee shall conduct a performance test using Method 9 of Appendix A-4 of 40 CFR Subpart 60 and in accordance with General Condition JJ to demonstrate compliance with the opacity limit in Section 2.1 B.4.c within 180 days after initial startup of the boiler when firing No. 2 fuel oil, and shall comply with Section 2.1 B.4.i below. [40 CFR 60.47c(a)]

Fuel Sulfur Monitoring [15A NCAC 02Q .0508(f)]

- h. The Permittee shall retain a copy of the fuel supplier certification for any oil fired in the boiler. The fuel supplier certification shall include the following information:
 - i. The name of the oil supplier;
 - ii. The sulfur content or maximum sulfur content (in percent by weight) of the oil; and
 - iii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c

[40 CFR 60.42c(h)(1), 60.44c(h), 60.46c(e), 60.48c(f)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the sulfur content of the oil exceeds the limit provided in Section 2.1 B.4.b, above, or if fuel supplier certifications are not retained as described above. [40 CFR 60.46c(e), 40 CFR 60.48c(f)(1)]

Opacity Monitoring [15A NCAC 02Q .0508(f)]

- i. After completion of the initial performance testing in Section 2.1 B.4.g, the Permittee shall comply with visible emissions monitoring for this boiler, as specified in the following:
 - i. The Permittee shall conduct subsequent Method 9 performance tests using the applicable schedule in (A) through (D) below, as determined by the most recent Method 9 performance test results. The observation period for Method 9 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent

during the initial 60 minutes of observation. [40 CFR 60.47c(a)(1)]

- (A) If no visible emissions are observed, a subsequent Method 9 performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;
 - (B) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted;
 - (C) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or
 - (D) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.
- ii. If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of Appendix A-4 of 40 CFR Part 60 performance test, the Permittee may, as an alternative to performing subsequent Method 9 performance tests, elect to perform subsequent monitoring using Method 22 of Appendix A-7 of 40 CFR Part 60 according to the procedures specified in (A) and (B) below:
- (A) The Permittee shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires No. 2 fuel oil using Method 22 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (i.e., 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period), the Permittee shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 performance test using the procedures in Section 2.1 B.4.i.i above within 45 calendar days.
 - (B) If no visible emissions are observed for 10 operating days during which No. 2 fuel oil is fired, observations can be reduced to once every 7 operating days during which No. 2 fuel oil is fired. If any visible emissions are observed, daily observations shall be resumed.
- [40 CFR 60.47c(a)(2)]
- iii. If the boiler (**ID No. B-Temp-1**) is not operating on the required date for the Method 9 performance test, the performance test shall be conducted the next time the boiler is operated for three or more daylight hours. [40 CFR 60.8(d)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the opacity monitoring is not conducted as specified.

Recordkeeping [15A NCAC 02Q .0508(f)]

- j. The Permittee shall record and maintain records of the amounts of each fuel fired during each month. [40 CFR 60.48c(g)(2)]
- k. The Permittee shall maintain records of No. 2 fuel oil supplier certifications as shown in Section 2.1 B.4.h [40 CFR 60.48c(e)(11), (f)(1)]
- l. The Permittee shall keep the following opacity monitoring records [40 CFR 60.48c(c)(1) and (c)(2)]:
 - i. For each performance test conducted using Method 9 of Appendix A-4 of 40 CFR Part 60, the Permittee shall keep the records including the following:
 - (A) Dates and time intervals of all opacity observation periods;
 - (B) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
 - (C) Copies of all visible emission observer opacity field data sheets;
 - ii. For each performance test conducted using Method 22 of Appendix A-4 of 40 CFR Part 60, the Permittee shall keep the records including the following:
 - (A) Dates and time intervals of all visible emissions observation periods;
 - (B) Name and affiliation for each visible emission observer participating in the performance test;
 - (C) Copies of all visible emission observer opacity field data sheets; and
 - (D) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.
- m. The Permittee shall maintain records of any occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected boiler. [40 CFR 60.7(b)]

- n. All records required under Sections 2.1 B.4.j through m shall be maintained by the Permittee for a period of two years following the date of such record. [40 CFR 60.48c(i)]
- o. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the requirements in Sections 2.1 B.4.j through n are not met.

Reporting [15A NCAC 02Q .0508(f), 40 CFR 60.48c(c), (j)]

- p. The Permittee shall submit a semiannual summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance from the requirements of this permit and excess emissions must be clearly identified. The summary report shall include the following information:
 - i. Fuel supplier certification(s), as described in Section 2.1 B.4.h.
 - ii. A certified statement signed by the owner or operator that the records of fuel supplier certification(s) submitted represents all of the No. 2 fuel oil fired during the semiannual period;
 - iii. Records from any subsequent performance tests performed as shown in Section 2.1 B.4.l.

Initial Notification [15A NCAC 02Q .0508(f)]

- q. The Permittee shall submit a notification of the actual date of initial startup of an affected boiler to the Regional Supervisor, DAQ, postmarked within 15 days after such date. [40 CFR 60.7, 60.48c(a)]

State-Only Requirement

5. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

- a. The Permittee shall operate the temporary boiler (**ID No. B-Temp-1**) only during periods when at least one of the boilers **ID No. B-10 or B-11** is shut down, with the following exceptions:
 - i. The Permittee may operate **ID Nos. B-10, B-11 and B-Temp-1** simultaneously, while firing No. 2 fuel oil in all three boilers, at a total heat input rate not to exceed 163.12 million Btu per hour.
 - ii. The Permittee may operate **ID Nos. B-10, B-11 and B-Temp-1** simultaneously while firing natural gas in at least one boiler when the wood-fired boiler (**ID No. WBES-1**) is not operating.

Recordkeeping

- b. The Permittee shall maintain records that demonstrate at least one of the boilers **ID No. B-10 or B-11** is shut down each time the temporary boiler (**ID No. B-Temp-1**) operates, except as allowed in Sections 2.1 B.5.a.i and 2.1 B.5.a.ii above.
- c. The Permittee shall maintain records that demonstrate that either Section 2.1 B.5.a.i or 2.1 B.5.a.ii is met each time all three boilers operate simultaneously.
- d. These records shall be maintained in a logbook (written or electronic format) for a period of two years and shall be made available to an authorized representative of the DAQ upon request.

6. 15A NCAC 02D .1111: MACT 40 CFR PART 63 SUBPART JJJJJJ

For these sources the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart JJJJJJ, "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers", including Subpart A "General Provisions."

C. Seven No. 2 fuel oil-fired peak shaver generators (ID Nos. EP-1 through EP-7)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	1.6 pounds per million Btu heat input	15A NCAC 02D .0402
Visible emissions	20 percent opacity each	15A NCAC 02D .0521
Hazardous air pollutants	<u>Beginning May 3, 2014</u> Reduce carbon monoxide (CO) emissions by at least 70 percent – OR – Limit the CO concentration in the exhaust to no more than 23 ppmvd at 15% O ₂	15A NCAC 02D .1111 40 CFR Part 63, Subpart ZZZZ
PM, SO ₂ , NO _x , and CO	See Section 2.2.A.1	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous Air Pollutants	See Section 2.2.A.3	15A NCAC 02Q .0317 (MACT Avoidance)

1. 15A NCAC 02D .0402: SULFUR OXIDES

- a. Emissions of sulfur dioxide emissions from the combustion of No. 2 fuel oil that are discharged from these sources (**ID Nos. EP-1 through EP-7**) into the atmosphere shall not exceed 1.6 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the applicable limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0402.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the combustion of No. 2 fuel oil in these sources (**ID Nos. EP-1 through EP-7**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources (**ID Nos. EP-1 through EP-7**) shall not be more than 20 percent opacity each when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit provided in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the combustion of No. 2 fuel oil in these sources (**ID Nos. EP-1 through EP-7**).

3. 15A NCAC 02D .1111, 40 CFR Part 63, Subpart ZZZZ “National Emission Standards for Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines (RICE)”

Applicability [40 CFR 63.6585, 63.6590(a)(1)(iii)]

- a. For this emission source(s) (existing stationary RICE located at an area source of HAP emissions), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, “Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines,” and Subpart A “General

Provisions.”

Definitions and Nomenclature [40 CFR 63.6603(b)]

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

Applicability Date

- c. The Permittee shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2014.

General Provisions [40 CFR 63.6665]

- d. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ.

Notifications [40 CFR 63.6645(a)(2)]

- e. The Permittee shall submit all of the notifications in the following regulations that apply by the dates specified:
 - i. 40 CFR 63.7(b) [performance testing] and (c) [quality assurance program];
 - ii. 40 CFR 63.8(e) [performance evaluation of CPMS], (f)(4) and (f)(6) [alternative monitoring methods]; and
 - iii. 40 CFR 63.9(b) through (e), and (g) and (h) [initial notifications].
- f. The Permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). [40 CFR 63.6645(g)]
- g. For each performance test, the Permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR 63.9(h)(2)(ii) and 63.10(d)(2). [40 CFR 63.6630(c), 63.6645(h)].

General Compliance Requirements [15A NCAC 02Q .0508(b)]

- h. The Permittee shall be in compliance with the emission limitations, operating limitations and other requirements that apply at all times. [40 CFR 63.6605(a)]
- i. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 C.3.h and i are not met.

Fuel Requirements [15A NCAC 02Q .0508(f)]

- j. The Permittee shall, use diesel fuel in the engine with:
 - i. A maximum sulfur content of 15 ppm; and
 - ii. A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.[40 CFR 63.6604(a) and 40 CFR 80.510(b)]

Emissions and Operating Limitations [15A NCAC 02Q .0508(b)]

- k. The Permittee shall, using an oxidation catalyst:
 - i. limit the concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O₂; or
 - ii. Reduce CO emissions by 70 percent or more.[40 CFR 63.6603(a), Table 2d, Table 2b]
- l. Except during periods of start-up, the Permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. [40 CFR 63.6603(a), Table 2b]
- m. Except during periods of start-up, the Permittee shall maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the most recent performance test. [40 CFR 63.6603(a), Table 2b]
- n. During periods of startup of the engine, the Permittee shall minimize the engine's time spent at idle and

minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h), Table 2d]

- o. If the engine(s) is not equipped with a closed crankcase ventilation system, the Permittee shall comply with either subparagraph i or ii, below. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements.
 - i. Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
 - ii. Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.
- [40 CFR 63.6625(g)]

Testing Requirements [15A NCAC 02Q .0508(b)]

- p. The Permittee shall conduct initial and subsequent performance tests to demonstrate compliance with the limitations in Sections 2.1 C.3.k and l [63.6620(a)]
- q. The Permittee shall conduct the initial performance test by October 30, 2014. This test shall be conducted according to 40 CFR 63 Subpart ZZZZ Tables 4 and 5 and the provisions in 40 CFR 63.7(a)(2). [40 CFR 63.6612(a)]
- r. The Permittee shall conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first. [40 CFR 63.6615, Table 3]
- s. Each performance test shall be conducted according to the requirements of 40 CFR 63 Subpart ZZZZ Table 4. If a non-operational stationary RICE is subject to performance testing, the Permittee does not need to start up the engine solely to conduct the performance test. The Permittee can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE. [40 CFR 63.6620(a), (b)]
- t. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if Sections 2.1 C.3.p through s are not met.

Monitoring [15A NCAC 02Q .0508(f)]

- u. The Permittee shall install, operate, and maintain continuous parameter monitoring systems (CPMS) to monitor the catalyst inlet temperature for each catalyst and reduce the temperature data to 4- hour rolling averages. The Permittee shall maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature in Section 2.1 C.3.l. [40 CFR 63 Subpart ZZZZ Table 5, 63.6625(b), 63.6640(a), Table 6]
 - v. The Permittee shall measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the performance test per Section 2.1 C.3.m. [40 CFR 63 Subpart ZZZZ Table 5, 63.6640(a), Table 6]
 - w. The Permittee shall install, operate, and maintain each CPMS according to the requirements in paragraphs i through vi:
 - i. The Permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of 40 CFR 63.6625 and in 40 CFR 63.8(d).
 - ii. The Permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan.
 - iii. The CPMS must collect data at least once every 15 minutes (see also 40 CFR 63.6635).
 - iv. For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
 - v. The Permittee shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.
 - vi. The Permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.
- [40 CFR 63.6625(b)]
- x. The Permittee shall monitor and collect data as follows:
 - i. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the Permittee shall monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure

of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

- ii. The Permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The Permittee shall, however, use all the valid data collected during all other periods.

[40 CFR 63.6635]

- y. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if Sections 2.1 C.3.u through x are not met.

Recordkeeping [15A NCAC 02Q .0508(f)]

- z. The Permittee shall keep records of the following monitoring data:

- i. catalyst(s) inlet temperature data including the 4-hour rolling averages; and
- ii. the monthly measurements of the pressure drop across the catalyst(s).

[40 CFR 63.6655(d)]

- aa. The Permittee shall keep the following:

- i. A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).
- ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
- iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
- iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- v. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.6655(a)]

- bb. For each inlet catalyst temperature CPMS, the Permittee shall keep the following records:

- i. Records described in 40 CFR 63.10(b)(2)(vi) through (xi).
- ii. Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).
- iii. Requests for alternatives to the relative accuracy test for CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.

[40 CFR 63.6655(b)]

- cc. The Permittee shall keep each record in a form suitable and readily accessible for expeditious review in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660]
- dd. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if Sections 2.1 C.3.z through cc are not met.

Reporting [§63.6650]

- ee. The permittee shall submit a compliance report semiannually postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit must be clearly identified. [40 CFR 63.6650(a), (b)(5) and 63.6650(f)]

- ff. The compliance report must contain:

- i. Company name and address;
- ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report; and
- iii. Date of report and beginning and ending dates of the reporting period.
- iv. If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with Section 2.1 C.3.i, including actions taken to correct a malfunction.
- v. If there are no instances of noncompliance from any emission or operating limitations that apply, a statement that there were no instances of noncompliance from the emission or operating limitations during the reporting period.
- vi. If there were no periods during which the CPMS was out-of-control, as specified in 40 CFR 63.8(c)(7), a

statement that there were no periods during which the CPMS was out-of-control during the reporting period.

[40 CFR 63.6650(c)]

- gg. For each instance of noncompliance from an emission or operating limitation that occurs for the stationary RICE where the Permittee is **not using a CMS** to comply with the emission or operating limitations, the compliance report must contain the information in Sections 2.1 C.3.ff.i. through iv and the following information:
- i. The total operating time of the stationary RICE at which the instance of noncompliance occurred during the reporting period.
 - ii. Information on the number, duration, and cause of instances of noncompliance (including unknown cause, if applicable), as applicable, and the corrective action taken.

[40 CFR 63.6650(d)]

- hh. For each instance of noncompliance from an emission or operating limitation occurring for a stationary RICE where the Permittee **is using a CMS** to comply with the emission and operating limitations in this subpart, the Permittee shall include information in Sections 2.1 C.3.ff.i through iv and the following information:
- i. The date and time that each malfunction started and stopped.
 - ii. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
 - iii. The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8).
 - iv. The date and time that each instance of noncompliance started and stopped, and whether each instance of noncompliance occurred during a period of malfunction or during another period.
 - v. A summary of the total duration of the instances of noncompliance during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
 - vi. A breakdown of the total duration of the instances of noncompliance during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - vii. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
 - viii. An identification of each parameter and pollutant that was monitored at the stationary RICE.
 - ix. A brief description of the stationary RICE.
 - x. A brief description of the CMS.
 - xi. The date of the latest CMS certification or audit.
 - xii. A description of any changes in CMS, processes, or controls since the last reporting period.

[40 CFR 63.6650(e)]

- ii. The Permittee shall be deemed in noncompliance with the reporting requirements of 15A NCAC 02D .1111 if Sections 2.1 C.3. ee through hh are not met.

D. Two Natural Gas/No. 2 fuel oil-fired boilers (ID Nos. B-10 and B-11)

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	1.6 pounds per million Btu heat input	15A NCAC 02D .0402
	0.5% weight sulfur in No. 2 fuel oil	15A NCAC 02D .0524 (40 CFR 60, Subpart Dc)
Particulate Matter	0.27 pounds per million Btu heat input	15A NCAC 02D .0503
Visible Emissions	(while burning natural gas) 20 percent opacity	15A NCAC 02D .0521
	(while burning No. 2 fuel oil) 20 percent opacity	15A NCAC 02D .0524 (40 CFR 60, Subpart Dc)
Hazardous Air Pollutants	See Section 2.1 D.5	15A NCAC 02D .1111 40 CFR Part 63, GACT Subpart JJJJJ
	See Section 2.2 A.3	15A NCAC 02Q .0317 (MACT Avoidance)
Particulate Matter Sulfur Dioxide Nitrogen Oxide Carbon Monoxide	See Section 2.2 A.1	15A NCAC 02Q .0317 (PSD Avoidance)

1. 15A NCAC 02D .0402: SULFUR OXIDES

- Emissions of sulfur dioxide emissions from the combustion of No. 2 fuel oil that are discharged from these sources (**ID Nos. B-10 and B-11**) into the atmosphere shall not exceed 1.6 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the applicable limit given in Section 2.1 D.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0402.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the combustion of natural gas or No. 2 fuel oil in these sources (**ID Nos. B-10 and B-11**).

2. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- Emissions of particulate matter into the atmosphere from the combustion of fuel oil or natural gas shall not exceed 0.27 pounds per million Btu heat input from these sources (**ID Nos. B-10 and B-11**).

Testing [15A NCAC 02Q .0508(f)]

- If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the applicable limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas or No. 2 fuel oil in these sources (**ID Nos. B-10 and B-11**).

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- Visible emissions from these sources (**ID Nos. B-10 and B-11**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the

results of this test are above the limit given in Section 2.1 D.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in these sources (**ID Nos. B-10 and B-11**).

4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524, "New Source Performance Standards (NSPS)," as promulgated in 40 CFR 60, Subpart Dc, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," including Subpart A, "General Provisions."

Emission Limitations

- b. The Permittee, at all times, shall not combust oil in the boiler that contains greater than 0.5 weight percent sulfur. [40 CFR 60.42c(d), (i)]
- c. For these boilers (**ID Nos. B-10 and B-11**), on and after the date on which the initial performance test is required under Section 2.1 D.4.g, visible emissions from the boiler when firing No. 2 fuel oil shall not be more than 20 percent opacity when averaged over a six-minute period, except for one six-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43c(c)]
- d. The opacity standard in Section 2.1 D.4.c applies at all times when firing No. 2 fuel oil in these boilers (**ID Nos. B-10 and B-11**), except during periods of startup, shutdown, or malfunction. [40 CFR 60.43c(d)]
- e. No fuel sulfur limits or opacity limits apply under 15A NCAC 02D .0524 when firing natural gas.

Testing [15A NCAC 02Q .0508(f)]

- f. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above any limit given in Sections 2.1 D.4.b and c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.
- g. For these boilers (**ID Nos. B-10 and B-11**), the Permittee shall conduct a performance test using Method 9 of Appendix A-4 of 40 CFR Subpart 60 and in accordance with General Condition JJ to demonstrate compliance with the opacity limit in Section 2.1 D.4.c within 45 days of switching fuel firing from natural gas to No. 2 fuel oil, or within 180 days after initial startup of the boiler when firing No. 2 fuel oil, whichever is later, and shall comply with Section 2.1 D.4.i below. [40 CFR 60.47c(a)]

Fuel Sulfur Monitoring [15A NCAC 02Q .0508(f)]

- h. To ensure compliance with the fuel sulfur limit in 2.1 D. 4. b, above, the Permittee shall retain a copy of the fuel supplier certification for any oil fired in these boilers (**ID Nos. B-10 and B-11**). The fuel supplier certification shall include the following information:
 - i. The name of the oil supplier;
 - ii. The sulfur content or maximum sulfur content of the oil (in percent by weight); and
 - iii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the sulfur content of the oil exceeds the limit provided in Section 2.1 D.4.b of this permit or if fuel supplier certifications are not retained as described above. [40 CFR 60.46c(e), 40 CFR 60.48c(f)]

Opacity Monitoring [15A NCAC 02Q .0508(f)]

- i. After completion of the initial performance testing in Section 2.1 D.4.g, the Permittee shall comply with visible emissions monitoring for these boilers (**ID Nos. B-10 and B-11**), as specified in the following:
 - i. The Permittee shall conduct subsequent Method 9 performance tests using the applicable schedule in (A) through (D) below, or within 45 days of switching fuel combustion from natural gas to No. 2 fuel oil, whichever is later, as determined by the most recent Method 9 performance test results. [40 CFR 60.47c(a)(1)]
 - (A) If no visible emissions are observed, a subsequent Method 9 performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;
 - (B) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted;

- (C) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or
- (D) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.
- (E) The observation period for Method 9 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.
- ii. If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 performance test, the Permittee may, as an alternative to performing subsequent Method 9 performance tests, elect to perform subsequent monitoring using Method 22 according to the procedures specified in the following:
 - (A) The Permittee shall conduct 10 minute observations (during normal operation) each operating day the affected boiler fires No. 2 fuel oil using Method 22 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (i.e., 30 seconds per 10-minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10-minute observation, immediately conduct a 30-minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period), the Permittee shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 performance test using the procedures in Section 2.1 D.4.i.i above within 45 calendar days.
 - (B) If no visible emissions are observed for 10 operating days during which No. 2 fuel oil is fired, observations can be reduced to once every 7 operating days during which No. 2 fuel oil is fired. If any visible emissions are observed, daily observations shall be resumed.

[40 CFR 60.47c(a)(2)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the opacity monitoring is not conducted as specified.

Recordkeeping [15A NCAC 02Q .0508(f), 40 CFR 60.48c(c)]

- j. The Permittee shall record and maintain records of the amounts of each fuel fired during each month. [40 CFR 60.48c(g)(2)]
 - k. The Permittee shall maintain records of No. 2 fuel oil supplier certifications as shown in Section 2.1 D.4.h. [40 CFR 60.48c(e)(11), (f)(1)]
 - l. The Permittee shall keep the following opacity monitoring records:
 - i. For each performance test conducted using Method 9 of Appendix A-4 of 40 CFR Part 60, the Permittee shall keep the records including the following:
 - (A) Dates and time intervals of all opacity observation periods;
 - (B) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
 - (C) Copies of all visible emission observer opacity field data sheets;
 - ii. For each performance test conducted using Method 22 of Appendix A-4 of 40 CFR Part 60, the Permittee shall keep the records including the following:
 - (A) Dates and time intervals of all visible emissions observation periods;
 - (B) Name and affiliation for each visible emission observer participating in the performance test;
 - (C) Copies of all visible emission observer opacity field data sheets; and
 - (D) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the Permittee to demonstrate compliance with the applicable monitoring requirements.
- [40 CFR 60.48c(c)(1), (2)]
- m. The Permittee shall maintain records of any occurrence and duration of any startup, shutdown, or malfunction in the operation the boilers. [40 CFR 60.7(b)]
 - n. All records required under Sections 2.1 D.4.j through m shall be maintained by the Permittee for a period of two years following the date of such record. [40 CFR 60.48c(i)]
 - o. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the recordkeeping requirements in Sections 2.1 D.4 j through n are not met.

Reporting [15A NCAC 02Q .0508(f), 40 CFR 60.48c(c), (j)]

- p. The Permittee shall submit a notification of the date of initial start-up of an affected facility, postmarked within 15 days after such date. [40 CFR 60.7(a)(3)]
- q. The initial notifications in §60.7 shall include:
 - i. The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
 - ii. If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.
 - iii. The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.
- r. The Permittee shall submit a semiannual summary report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance from the requirements of this permit and excess emissions must be clearly identified. The summary report shall include the following information:
 - i. Fuel supplier certification(s), as described in Section 2.1 D.4.h.
 - ii. A certified statement signed by the Permittee that the records of fuel supplier certification(s) submitted represents all of the No. 2 fuel oil fired during the semiannual period;
 - iii. Records from any subsequent performance tests performed as shown in Section 2.1 D.4.l.
- s. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the reporting requirements in Sections 2.1 D.4. p through r are not met.

5. 15A NCAC 02D .1111: - MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [§63.11193, §63.11194(a)(2), (c), §63.11200(c)]

- a. For these sources the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart JJJJJ, "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers," including Subpart A "General Provisions."

Definitions and Nomenclature

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.11237 shall apply.

General Provisions [§63.11235]

- c. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart JJJJJ.

Compliance Dates [§63.11196(c), §63.11210(e), (f)]

- d. For boilers that combust only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a particulate matter (PM) emission limit under 40 CFR 63 Subpart JJJJJ, the Permittee is not subject to the PM emission limit in Table 1 of this subpart until September 14, 2019, providing the type of fuel combusted is monitored and recorded on a monthly basis. On and after September 14, 2019, the Permittee is subject to the PM emission limit Section 2.1 D.5.i and must demonstrate compliance with the PM emission limit consistent with §63.11211 no later than March 12, 2020.
- e. For boilers that combust only ultra-low-sulfur liquid fuel as defined in §63.11237 (i.e., a distillate oil that has less than or equal to 15 parts per million (ppm) sulfur), the Permittee is not subject to the PM emission limit in Section 2.1 D.5.i. If the Permittee intends to burn a fuel other than ultra-low-sulfur liquid fuel or gaseous fuels as defined in §63.11237 on or after September 14, 2019, the Permittee must conduct a performance test within 60 days of burning the new fuel unless Section 2.1 D.5.d above is applicable. The Permittee shall achieve compliance with the provisions of this subpart upon startup of the affected source(s).

General Compliance Requirements [15A NCAC 02Q .0508(b), §63.11205(a)]

- f. At all times the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to

make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Operating Limitations [15A NCAC 02Q .0508(b)]

- g. Prior to September 14, 2019, to avoid being subject to the PM emission limit in Section 2.1 D.5.i below, the Permittee shall not combust oil that contains greater than 0.50 weight percent sulfur. [§63.11210(e)]
- h. If oil with a fuel content greater than 15 ppm sulfur is combusted on or after September 14, 2019, the Permittee shall be subject to the PM limits in Section 2.1 D.5.i for that boiler. [§63.11210(e), (f)]
- i. Except as allowed pursuant to Sections 2.1 D.5.g and h above, each boiler, except during periods of startup and shut down, shall not emit PM emissions at a rate greater than 3.0E-02 lb per MMBtu of heat input. [§63.11201, Table 1 to Subpart JJJJJ]
- j. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 D.5.g through i are not met.

Initial Testing Requirements [15A NCAC 02Q .0508(b)]

- k. If applicable, the Permittee shall demonstrate compliance, consistent with §63.11211, with the PM emission limit in Section 2.1 D.5.i by the applicable compliance dates specified in Sections 2.1 D.5.d and e. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Subsequent Testing Requirements [15A NCAC 02Q .0508(b), §63.11212, §63.11220]

- l. The Permittee shall conduct all applicable performance (stack) tests according to §63.11212 on a triennial basis, except as specified in Section 2.1 D.5.m below. Triennial performance tests must be completed no more than 37 months after the previous performance test.
- m. When demonstrating initial compliance with the PM emission limit, if the boiler's performance test results show that the PM emissions are equal to or less than half of the PM emission limit, the Permittee does not need to conduct further performance tests for PM until September 14, 2021, but must continue to comply with all applicable operating limits and monitoring requirements and must comply with the provisions as specified in i. through iv. below.
 - i. A performance test for PM must be conducted by September 14, 2021.
 - ii. If the performance test results show that the PM emissions are equal to or less than half of the PM emission limit, the Permittee may choose to conduct performance tests for PM every fifth year. Each such performance test shall be conducted no more than 61 months after the previous performance test.
 - iii. If the Permittee intends to burn a new type of fuel other than ultra-low-sulfur liquid fuel or gaseous fuels as defined in §63.11237, the Permittee shall conduct a performance test within 60 days of burning the new fuel type.
 - iv. If the performance test results show that the PM emissions are greater than half of the PM emission limit, the Permittee shall conduct subsequent performance tests on a triennial basis as specified in Section 2.1 D.5.l above.
- n. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 D.5.l and m are not met.

Performance Tune-up Requirements [15A NCAC 02Q .0508(b)]

- o. The Permittee is required to conduct an initial performance tune-up no later than 25 months after the initial startup of the affected source. Subsequent tune-ups are required to be completed on a biennial basis.
 - i. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up.
 - ii. The Permittee shall conduct the tune-ups while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
 - iii. The tune-ups shall be conducted according to the following procedures:
 - (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from

the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.

- (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.
- (D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
- (E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- (F) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

[§63.11201(b), Table 2, §63.11223(a), (b)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Recordkeeping [15A NCAC 02Q .0508(f)]

- p. The Permittee shall maintain on site and submit if requested by the Administrator, a report containing the following information:
 - i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
 - ii. A description of any corrective actions taken as a part of the tune-up of the boiler.
 - iii. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler. Units sharing a fuel meter may estimate the fuel use by each unit.

[§63.11223(b)(6)]

- q. The Permittee shall maintain the following records:
 - i. As required in §63.10(b)(2)(xiv), the Permittee shall keep a copy of each notification and report that was submitted to comply with this rule and all documentation supporting any Notification of Compliance Status that was submitted.
 - ii. The Permittee shall keep the following records:
 - (A) Records that identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; and
 - (B) Records of monthly fuel use by each boiler, including the type(s) of fuel amount(s) used and sulfur content of fuels burned.
 - iii. Records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment.
 - iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 2.1 D.5.f, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

[§63.11222(a)(2), §63.11225(c)]

- r. The records must be in a form suitable and readily available for expeditious review. The Permittee shall keep each record for 5 years following the date of each recorded action. The Permittee shall keep each record on site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The Permittee may keep the records off-site for the remaining 3 years.

[§63.11225(d)]

- s. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 D.5.p through r are not met.

Reporting [15A NCAC 02Q .0508(f)]

- t. In addition to the notification and reporting requirements of the EPA, the Permittee is required to NOTIFY the

Regional Supervisor, DAQ, in WRITING, of the following:

- i. Initial Notification (per §63.9(b) and §63.11225(a)(2)) is required within 120 days after the source becomes subject to the standard.
 - ii. The Notification of Compliance Status in accordance with §63.9(h) is required no later than 120 days after the applicable compliance date specified in §63.11196 unless you must conduct a performance stack test. If you must conduct a performance stack test, you must submit the Notification of Compliance Status within 60 days of completing the performance stack test. In addition to the information required in §63.9(h)(2), your notification must include the certification(s) of compliance in §63.11225(a)(4), as applicable, and signed by a responsible official specified in §63.11196.
 - iii. If the Permittee is using data from a previously conducted emission test to serve as documentation of conformance with the emission standards and operating limits of this subpart, the Permittee shall include in the Notification of Compliance Status the date of the test and a summary of the results, not a complete test report, relative to this subpart.
- u. If the Permittee is not subject to the emission limitation in Section 2.1 D.5.i, the annual compliance certification reporting requirements of §63.11225(b) shall be met by complying with General Condition P of Section 3 of this permit.
- v. If the Permittee is subject to the emission limitation in Section 2.1 D.5.i, the Permittee shall submit a Notification of Intent to conduct a performance test to the DAQ at least 60 days before the performance stack test is scheduled to begin.
- w. If the Permittee must conduct a performance stack test, the Permittee shall submit the Notification of Compliance Status within 60 days of completing the performance stack test. The Permittee shall submit the Notification of Compliance Status in accordance with i through iii below. The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs i through iii, as applicable, and signed by a responsible official.
- i. The Permittee shall submit the performance test data as specified in Section 2.1 D.5.x below.
 - ii. For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."
 - iii. The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in §63.13.
- x. Within 60 days after the date of completing each performance test (as defined in §63.2) required by this subpart, the Permittee shall submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either i or ii below:
- i. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www3.epa.gov/tn/chief/ert/ert_info.html) at the time of the test, the Permittee shall submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), the Permittee shall submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.
 - ii. For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, the Permittee shall submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.
- y. In addition to Sections 2.1 D.5.t through x the Permittee shall comply with the notification, recordkeeping and reporting requirements in General Condition JJ.

- z. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 D.5.t through y are not met.

E. 2220 hp diesel-fired emergency generator (ID No. EP-13)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	1.6 pounds per million Btu heat input	15A NCAC 02D .0402
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Multiple pollutants	See Section 2.1 E.3	15A NCAC 02D .0524 (40 CFR Part 60, Subpart IIII)
Hazardous air pollutants	Meet the requirements of NSPS Subpart IIII	15A NCAC 02D .1111 (40 CFR Part 63, Subpart ZZZZ)

1. 15A NCAC 02D .0402: SULFUR OXIDES

- a. Emissions of sulfur dioxide from this source (**ID No. EP-13**) shall not exceed 1.6 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0402.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in this source (**ID No. EP-13**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. EP-13**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit provided in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuel in this source (**ID No. EP-13**).

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

Applicability [15A NCAC 02Q .0508(f), 40 CFR 60.4200(a)(2)(i)]

- a. For this engine, the Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," including Subpart A "General Provisions."

General Provisions [15A NCAC 02Q .0508(f)]

- b. Pursuant to 40 CFR 60.4218, The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 8 of 40 CFR 60 Subpart IIII.

Emission Standards [15A NCAC 02Q .0508(f)]

- c. The Permittee shall comply with the emission standards 40 CFR 60.4202 for all pollutants, for the same model

year and maximum engine power for this engine. [40 CFR 60.4205(b)]

Fuel Requirements [15A NCAC 02Q .0508(f)]

- d. The Permittee shall use diesel fuel in the engine that meets the requirements of 40 CFR 80.510(b) including:
 - i. a maximum sulfur content of 15 ppm; and
 - ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.[40 CFR 60.4207(b)]

Testing [15A NCAC 02Q .0508(f)]

- e. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in conditions c. and d. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

- f. The engine has the following monitoring requirements:
 - i. The engines shall be equipped with a non-resettable hour meter prior to startup. [40 CFR 60.4209(a)]
 - ii. The engine, if equipped with a diesel particulate filter, must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]

Compliance Requirements [15A NCAC 02Q .0508(b)]

- g. The Permittee shall:
 - i. operate and maintain the engines and control devices according to the manufacturer's emission related-written instructions over the entire life of the engine;
 - ii. change only those emission-related settings that are permitted by the manufacturer; and
 - iii. meet the requirements of 40 CFR 89, 94 and/or 1068 as applicable.[40 CFR 60.4206 and 60.4211(a)]
- h. The Permittee shall comply with the emission standards in Section 2.1 E.3.c by purchasing an engine certified to the emission standards in condition c for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4211(c)]
- i. In order for the engine to be considered an emergency stationary ICE under this condition, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited.
 - (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (2) The Permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraph 2.1 E.3.i.2.i of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 2.1 E.3.i.3 of this condition counts as part of the 100 hours per calendar year allowed by this paragraph.
 - (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
 - (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph 2.1 E.3.i.2 of this condition. Except as provided in paragraph 2.1 E.3.i.3.i of this condition, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a

local area or region.

- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 60.4211(f)]

- j. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the requirements in Sections 2.1 E.3.f through i are not met.

Recordkeeping [15A NCAC 02Q .0508(f)]

- k. To ensure compliance, the Permittee shall perform inspections and maintenance on the engine as recommended by the manufacturer per 40 CFR 60.4206 and 40 CFR 60.4211(a). The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the engine;
 - iv. any variance from manufacturer's recommendations, if any, and corrections made;
 - v. the hours of operation of the engine in emergency and non-emergency service. [40 CFR 60.4214(b)]
 - vi. if a PM filter is used, records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached [40 CFR 60.4214(c)]; and
 - vii. documentation from the manufacturer that the engine is certified to meet the emission standards in Section 2.1 E.3.c.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- l. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit shall be clearly identified.
- m. If the Permittee owns or operates an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates for the purposes specified in condition 2.1 E.3.i.3.i, the Permittee shall submit an annual report according to the requirements at 40 CFR 60.4214(d). This report must be submitted to the Regional Supervisor and the EPA. [40 CFR 60.4214(d)]

4. 15A NCAC 02D .1111 MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 6590(a)(2)(iii)]

- a. For these sources (new stationary RICE located at an area source of HAP emissions) the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart ZZZZ, "National Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Stationary RICE subject to Regulations under 40 CFR Part 60 [15A NCAC 02Q .0508(f)]

- b. Pursuant to 40 CFR 63.6590(c)(1), these sources must meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A by meeting the requirements of 40 CFR Part 60 Subpart IIII. No further requirements apply for these engines under 40 CFR 63 Subpart ZZZZ and Subpart A.
If these requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

2.2 – Multiple Emission Sources and Specific Limitations and Conditions

A. Facility Wide Emission Sources

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter Sulfur Dioxide Nitrogen Oxide Carbon Monoxide	Less than 250 tons per 12-month period (each pollutant)	15A NCAC 02Q .0317 (PSD Avoidance)
Toxic Air Pollutants	State-enforceable only Toxic pollutants emission rates (TPER)	15A NCAC 02Q .0711
Hazardous Air Pollutants	Less than 10/25 tons of single/total HAPs per consecutive 12-month period	15A NCAC 02Q .0317 (MACT Avoidance)
Hazardous Air Pollutants	Avoidance of Accidental Release Prevention Requirements	15A NCAC 02Q .0317 (112(r) avoidance)

1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS

For 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources, the Permittee shall discharge from all facility wide emission sources combined into the atmosphere less than 250 tons each of particulate matter, sulfur dioxide, nitrogen oxide, and carbon monoxide per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test show facility wide emissions are above the limits given in Section 2.2 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. Each calendar month, the Permittee shall calculate and record the amount of particulate matter, sulfur dioxide, nitrogen oxide, and carbon monoxide emissions from the wood-fired boiler (**ID No. WBES-1**) in accordance with the following equations:
 - i. Particulate matter.

$$E_{PM10} = (Q_w)(0.13 \text{ pounds } PM_{10} \text{ per million Btu}^1) / 2000$$
 - ii. Sulfur dioxide.

$$E_{SO2} = (Q_w) (0.0025 \text{ pounds } SO_2 \text{ per million Btu}^2) / 2000$$
 - iii. Nitrogen oxides.

$$E_{NOx} = (Q_w)(0.263 \text{ pounds } NOx \text{ per million Btu}^3) / 2000$$
 - iv. Carbon monoxide.

$$E_{CO} = (Q_w)(0.408 \text{ pounds } CO \text{ per million Btu}^4) / 2000$$

Where: E_{PM10} = Particulate matter emissions in tons per month
 E_{SO2} = Sulfur dioxide emissions in tons per month
 E_{NOx} = Nitrogen oxide emissions in tons per month
 E_{CO} = Carbon monoxide emissions in tons per month
 Q_w = Quantity of wood combusted in million Btu per month

Assumptions: Wood heating value = 4500 Btu per pound (green ton basis)

¹ Emission factor is based on 5/22/07 stack test.
² Emission factor is based on 4/12/01 stack test.
³ Emission factor is based on 7/26/02 stack test.
⁴ Emission factor is based on 7/26/02 stack test.

3.3 pounds steam per pound of wood (Marion Plant empirical results)

- d. The Permittee shall submit a complete permit application to the Division of Air Quality to revise the emission factor(s) listed in Section 2.2.A.1.c above within 30 days of receiving the results of any performance test that demonstrate emission rates greater than those currently used in Section 2.2.A.1.c.
- e. Each calendar month, the Permittee shall calculate and record the total amount of particulate matter, the total amount of sulfur dioxide, the total amount of nitrogen oxide, and the total amount of carbon monoxide emitted from these sources (**ID Nos. B-10, B-11, B-Temp-1, EP-1 to EP-7 and I-EP10 to I-EP12**) using emission factors based on U. S. EPA AP-42 emission factors, NC DAQ emission spreadsheets, or NC DAQ approved stack testing.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if monthly emission records are not maintained or if facility wide emissions of particulates, sulfur dioxide, nitrogen oxide, or carbon monoxide exceed the limit in Section 2.2 A.1.a above.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
 - i. The monthly quantity of wood combusted for the previous 17 months;
 - ii. The facility wide totals of actual particulate, sulfur dioxide, nitrogen oxide, and carbon monoxide emissions for each month during the previous 17 months; and
 - iii. The facility wide rolling totals of actual particulate, sulfur dioxide, nitrogen oxide, carbon monoxide emissions for each of the 12-month periods over the previous 17 months.
 All instances of deviations from the requirements of this permit must be clearly identified.

State Enforceable Only

2. **TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT** - Pursuant to 15A NCAC 02Q .0711 "Emission Rates Requiring a Permit," for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 02Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility's non combustion sources, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 02Q .0711.
 - a. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
 - b. **PRIOR** to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D .1100 "Control of Toxic Air Pollutants".
 - c. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

Pollutant	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Hydrogen chloride (hydrochloric acid) (7647-01-0)				0.18

3. **15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

- a. In order to avoid classification as a major source for MACT applicability, the facility-wide emission sources shall discharge into the atmosphere less than 10 tons of any single hazardous air pollutant (HAP) per consecutive 12-month period and less than 25 tons of any combination of HAPs per consecutive 12-month period.
- b. HAP emissions from this source (**ID No. WBES-1**) shall be controlled by one multicyclone (**ID No. MCCD-2**) followed by one venturi scrubber (**ID No. WSCD-2**).

Monitoring [15A NCAC 02Q .0508(f)]

- c. The Permittee shall perform inspection and maintenance and monitoring of the multicyclone and scrubber as specified in Conditions 2.1 A.1.d and 2.1 A.1.e and shall monitor the flow rate of the scrubber as specified in Condition 2.1 A.4.c. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if inspection and maintenance of the multicyclone and scrubber are not performed or if the flow rate of the scrubber is not monitored.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The Permittee shall keep a record of the applicability determination on site at the source for a period of five years after the determination, or until the source becomes an affected source. The determination must include the analysis demonstrating why the Permittee believes the facility is an unaffected source pursuant to 40 CFR Part 63.10(b)(3). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS

for 40 CFR Part 68 "ACCIDENTAL RELEASE PREVENTION REQUIREMENTS: RISK MANAGEMENT PROGRAMS UNDER THE CLEAN AIR ACT, SECTION 112(r)" - To comply with this permit and avoid the applicability of 40 CFR Part 68 "Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Section 112(r)," the Permittee shall:

- a. not use, store or handle, within any process, more than 20,000 pounds of aqueous ammonia at concentrations greater than 20%; and,
- b. not use, store or handle, within any process, more than 2,500 pounds (193 gallons) of chlorine.

2.3 – Permit Shield for Non-applicable Requirements

The Permittee is shielded from the following non-applicable requirements as of the date of issuance of this permit based on information furnished in letters dated August 27, 2001 and June 20, 2003 from Trigen-BioPower, Inc⁵. This shield does not apply to future modifications or changes in the method of operation. [15A NCAC 02Q .0512(a)(1)(B)]:

- A. 15A NCAC 02D .0524 [40 CFR 60.40b (Subpart Db)] is not applicable to this source (**ID No. WBES-1**) because:
 - 1. Subpart Db applies to steam generating units that commence construction, modification, or reconstruction after June 19, 1984 and that have a maximum design heat input capacity of greater than 100 million Btu per hour;
 - 2. This source (**ID No. WBES-1**) has a maximum heat input capacity of 162.9 million Btu per hour and was manufactured (constructed) in 1972;
 - 3. This source (**ID No. WBES-1**) was purchased by the Permittee and relocated/reassembled at the North Cove, North Carolina facility in 1985. While some source components were replaced as part of the reassembly, the fixed capital cost of the replacement components did not exceed 50 percent of the fixed capital costs that would be required to construct a comparable entirely new source. Thus this source cannot be considered “reconstructed” under the definition in 40 CFR 60.15;
 - 4. The design capacities or method of operation were not altered as a result of the reassembly and re-commissioning of the source (**ID No. WBES-1**). Therefore, there was no increase in the hourly emission rate from the source and this project can not be considered a “modification” under 40 CFR 60.14; and
 - 5. This source (**ID No. WBES-1**) was upgraded in December 2000, with the installation of an overfire air system. The project was not considered a “modification” under 40 CFR 60.14(e)(5) since the primary function was the reduction of both nitrogen oxide and carbon monoxide. This project is also not considered a “reconstruction” under 40 CFR 60.15 since the fixed capital costs of this project did not exceed 50 percent of the fixed capital costs that would be required to construct a comparable entirely new facility.
- B. 15A NCAC 02D .1111 is not applicable to this source (**ID No. WBES-1**) because:
 - 1. Source testing conducted July 2002 for hydrogen chloride, formaldehyde, and acetaldehyde and the development of source specific emission factors for these pollutants; and
 - 2. Applying current AP-42 emission factors for the remaining hazardous air pollutants (HAP’s) emitted indicates that the potential emissions for all HAP’s emitted from this facility are below the Title III threshold of 10 tons per year for any single HAP or greater than 25 tons per year for all HAP’s combined. As such, the facility is classified as a Title III minor source as affirmed by DAQ in its July 11, 2003 letter to the Permittee, and is not subject to Section 112 requirements. The Permittee shall keep a record of the applicability determination on site at the source for a period of five years after the determination, or until the source becomes an affected source. The determination must include the analysis demonstrating why the Permittee believes the source is unaffected pursuant to 40 CFR 63.10(b)(3). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.

⁵Trigen-BioPower, Inc owned and operated the wood-fired boiler (**ID No. WBES-1**) facility until it was purchased by Baxter Healthcare in 2010. The permit shield for non-applicable requirements transferred to Baxter Health Care with the ownership change.

SECTION 3 - GENERAL CONDITIONS (version 5.1, 08/03/2017)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application;
 - b. changes that modify equipment or processes; or
 - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.
2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and

readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.

3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. Prevention of Accidental Releases - Section 112(r) [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. Title IV Allowances [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. Air Pollution Emergency Episode [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. Registration of Air Pollution Sources [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. Ambient Air Quality Standards [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. General Emissions Testing and Reporting Requirements [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.

- a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
- b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound